

9.04  
1883

# **ROLL-OVER HEDGE ANALYSIS**

## **Corn Drought Years**

AGR. ECON. & RUR. SOC.  
REF. ROOM #242  
THE OHIO STATE UNIVERSITY  
2120 FYFFE RD.  
COLUMBUS, OHIO 43210

RECEIVED  
NOV 10 1991  
AGRICULTURAL ECONOMICS  
& RURAL SOCIOLOGY

### **Guidelines**

**and**

### **Resource Materials**

Prepared by

Allan E. Lines  
Department of Agricultural Economics  
and Rural Sociology  
The Ohio State University  
2120 Fyffe Road  
Columbus, OH 43210

**I. During droughts, the spread between old and new crop contracts often becomes relatively large.**

**Example: '88 DROUGHT**

July '89 Contract @ \$3.10

Dec. '89 Contract @ 2.40

**SPREAD                      \$ .60**

**II. Expect spread to narrow to 10¢**

**A. Old crop ('88) price ↓**

**- Large new crop ('89)**

**B. New crop ('89) price ↑**

**- Small new crop ('89)**

### III. Outcome when old crop price ↓

#### A. Now (summer '88)

1. Sell old crop (July '89)      \$ 3.10
2. Buy new crop (Dec. '89)      2.40

#### B. Future

3. Assume spread ↓      .10
4. Old crop price ↓      2.50
5. New crop price →      2.40
6. Buy old crop      2.50
- Profit (3.10 - 2.50)      .60
7. Sell new crop      2.40
8. Hedge price      3.00
9. Worst case scenario      3.00

#### IV. Outcome when new crop price ↑

##### A. Now (summer '88)

1. Sell old crop (July '89)      \$ 3.10
2. Buy new crop (Dec. '89)      2.40

##### B. Future

3. Assume spread ↓      .10
4. Old crop price →      3.10
5. New crop price ↑      3.00
6. Buy old crop      3.10
7. Sell new crop      3.00
- Profit (3.00 - 2.40)      .60
8. Sell new crop      3.00
9. Best case scenario      3.60

# ROLL-OVER HEDGE ANALYSIS

## Corn Drought Years

| (A)                | (B)                        | (C)      | (D)             | (E)      | (F)                       | (G)      | (H)                 | (I)               | (J)                   |
|--------------------|----------------------------|----------|-----------------|----------|---------------------------|----------|---------------------|-------------------|-----------------------|
| Crop<br>Year       | June-Sept.<br>High Futures |          | July 1 Futures  |          | Sept.-Nov.<br>Low Futures |          | Profit <sup>@</sup> |                   |                       |
|                    | Date                       | July     | Dec.            | July     | Dec.                      | Dec.     | Date                | Straight<br>Hedge | July/Dec.<br>Hedge    |
|                    |                            | (\$/bu.) | (\$/bu.)        | (\$/bu.) | (\$/bu.)                  | (\$/bu.) |                     | (D-G)<br>(\$/bu.) | (C-E+F-G)<br>(\$/bu.) |
| 70-71 <sup>#</sup> | 9/15                       | 1.68     | 1.52<br>(10/26) | 1.52     | 1.46                      | 1.12     | 10/01               | .40               | .50                   |
| 74-75              | 9/30                       | 3.99*    | 3.45            | 2.71     | 2.33                      | 2.57     | 11/19               | .88               | 1.04                  |
| 80-81 <sup>#</sup> | 9/08                       | 3.79     | 3.54<br>(9/22)  | 3.24     | 3.46                      | 2.61     | 11/30               | .93               | 1.40                  |
| 83-84              | 8/25                       | 3.88     | 3.25            | 3.51     | 3.11                      | 2.64     | 11/30               | .61               | .84                   |
| 88-89              | 6/23                       | 3.53     | 2.86            | 2.72     | 2.61                      | 2.18     | 8/03                | .68               | 1.24                  |
| Average            |                            |          |                 |          |                           |          |                     | .70               | 1.00                  |

<sup>@</sup> Before taxes, interest, and commissions

<sup>#</sup> Dec. not trading when July reached summer high (sold first day traded)

\* Contract high \$4.11 on 10/7/74